

U.S.-China Low-Carbon City Action Planning and Technology Solutions Workshop

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Company: Saint-Gobain PAM China
公司名称: 圣戈班管道系统有限公司
Presenter: Hudson Li
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圣戈班 - 拥有352年历史, 建筑领域的行业领导者之一
Saint-Gobain 352 year history, industry leader in the field of Architecture



2016 销售额达
2016 sales amount
391 亿欧元
39.1 billion Euro

业务遍布
66 个国家
Business in **66**
countries

超过 **80%** 的销售额来自
可持续舒适建筑市场: 建筑, 翻新, 城
市基础建设和土木工程
More than **80%** of sales come from
Sustainable and comfortable building
market: construction, refurbishment,
urban infrastructure and civil
engineering

352 年悠久历史
352 year history

全球超过**170,000** 名员工
来自**99** 个国家
More than **170000** employees
From **99** countries



全球工业企业**100** 强, 超过 **950** 家生产基地
top 100 of the global industrial enterprises,
more than **950** production bases

超过 **4,000** 销售网点
More than 4000 sales outlets

围绕五大舒适性纬度构建全球性舒适建筑整体解决方案
 WE HELP TO CREATE
 GREAT LIVING PLACES AND IMPROVE DAILY LIFE



Technology name 技术名称 Elixair system 地源空气新风系统

1- Takes exterior air into the network
将外部空气吸入管网系统

3- Link to ventilation system
EAHE releases fresh air in the building
连接通风设备，将热交换交换后的新风引入室内

2- Network of pipes measured by Saint-Gobain PAM – Elixair
圣戈班PAM提供Elixair的系统设计方案

1. Energy saving

节能降耗

2. Functioning from 100 to 100 000m³h or more

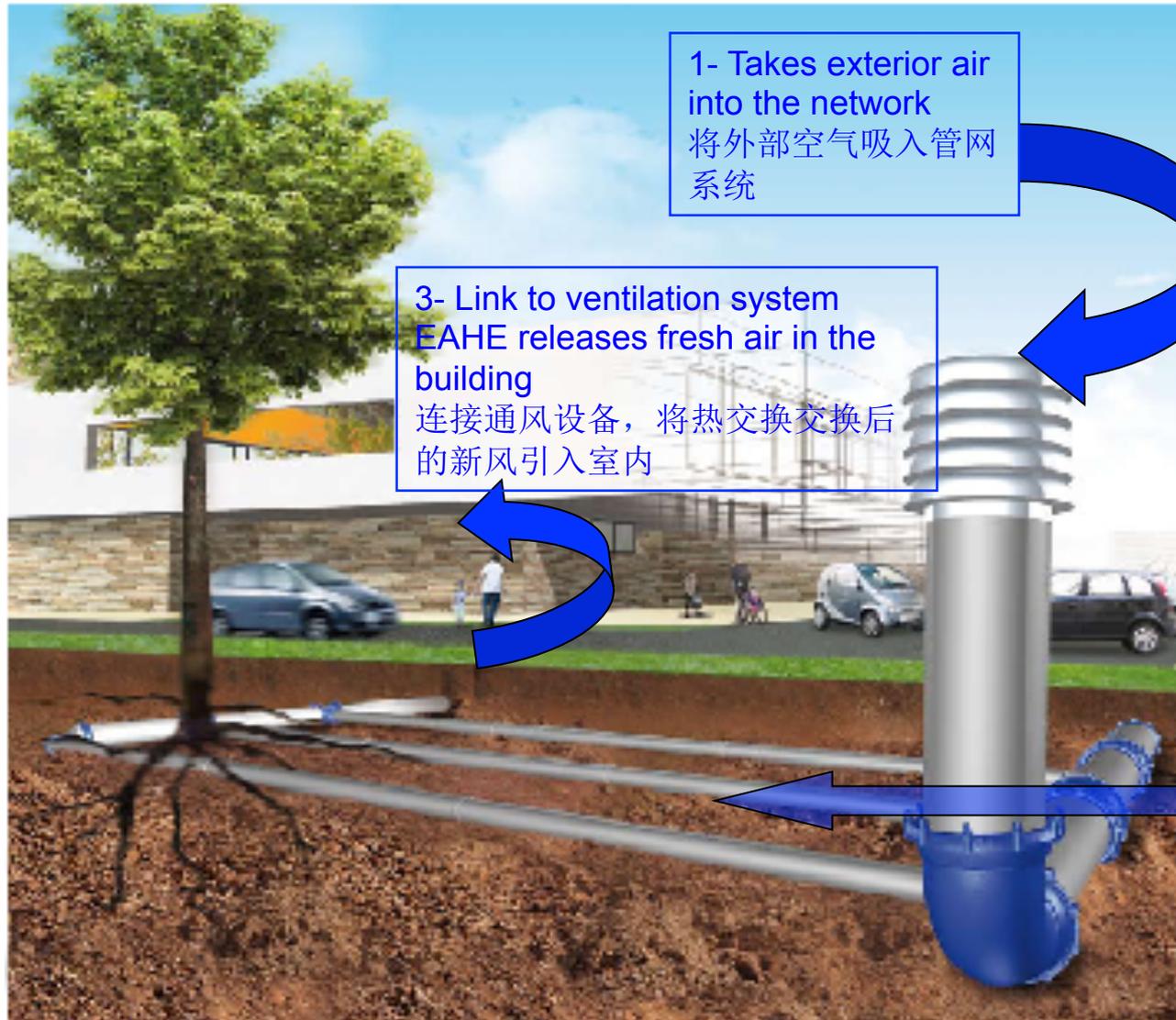
服务于风量需求在100 – 100,000 m³h的空间

3. Widely used in Europe

在欧洲已经广泛使用

4. Fantastic user experience

绝佳的用户体验

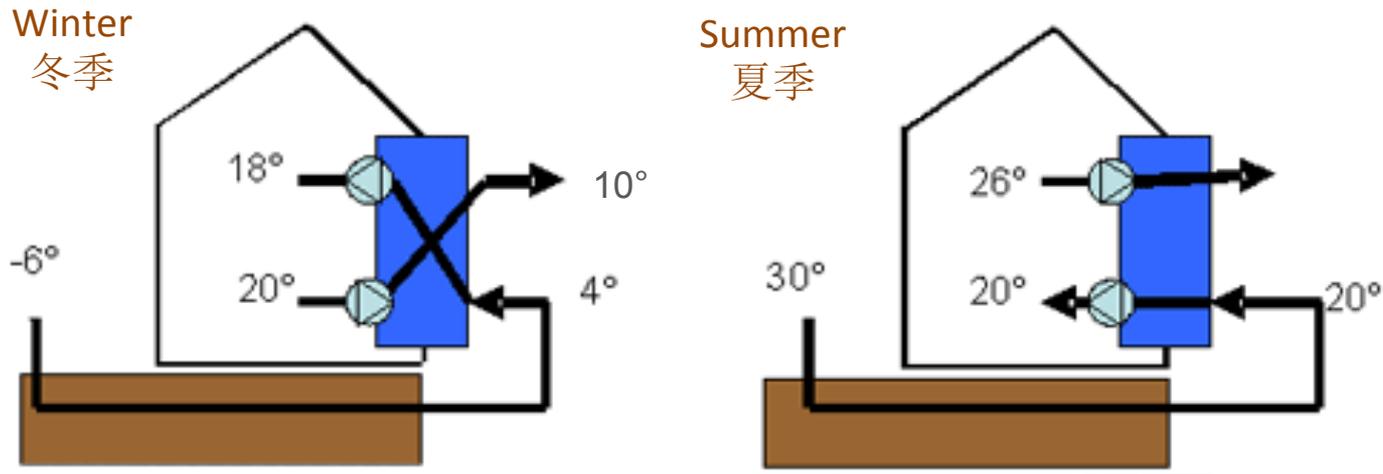


Technology description 技术描述

Usually, the speed of the fresh air is regulated by the ventilation system of the building
通常，建筑的通风系统已经定义了所需的新风量

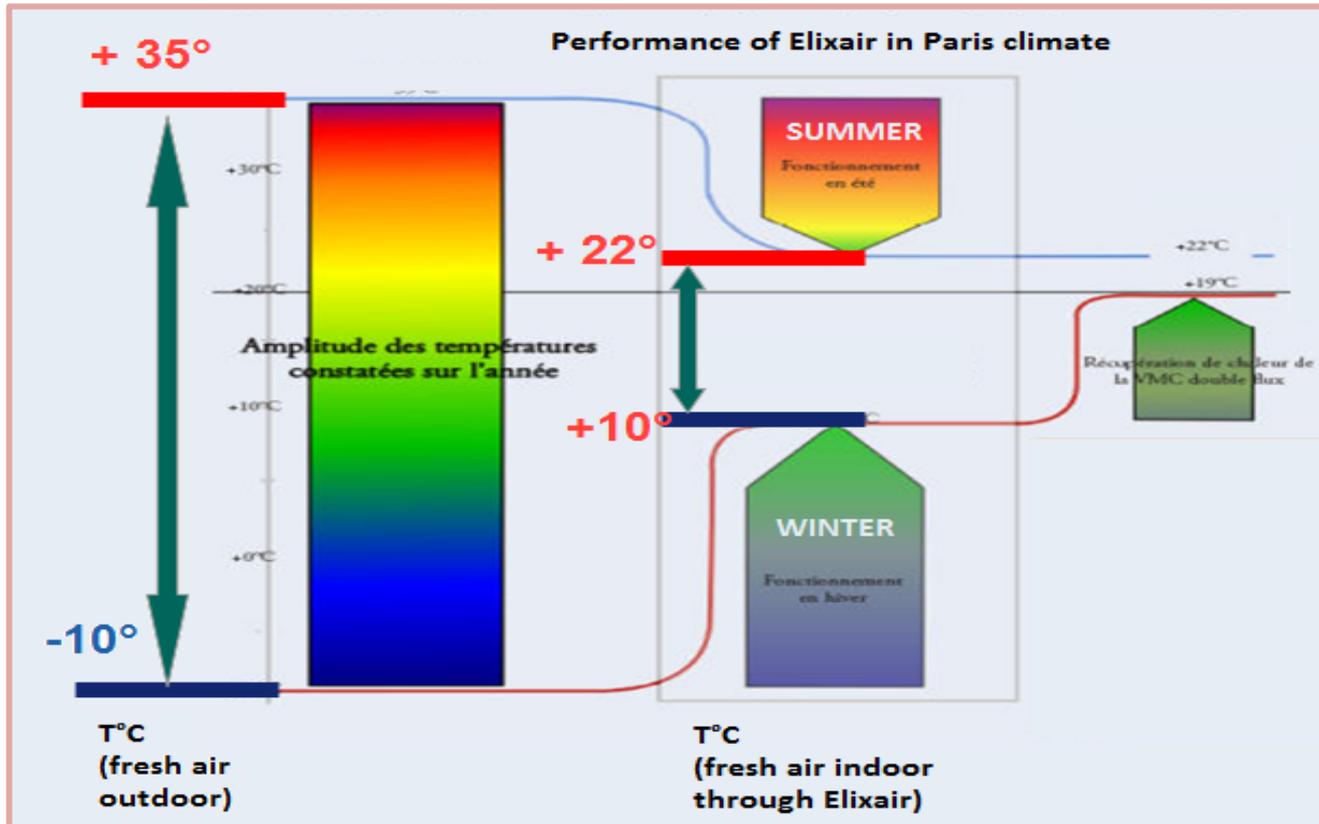
In winter, the fresh air benefits from the exchanger of the double-flux ventilation
冬季，户外冷新风通过Elixair系统热传递后进行二次加热引入室内

In summer, the exchanger of the double-flux ventilation does not operate
夏季，户外热新风通过Elixair系统热交换后直接引入室内



Note : the presence of a ventilator to control the speed of the air in the EAHE is essential
备注：需要通风设备的配合以控制进入Elixair系统的风速

Key benefits 关键优势



Energie saving! 节能!

- 由示意图可以看出，户外的热风 and 冷风通过新风系统的热交换后，大大缩小了温度范围，从而达到为空调系统节能降耗的目的。

Case study 1 案例分析1

SG Multi-comfort House in Beaucozé

法国多功能房屋

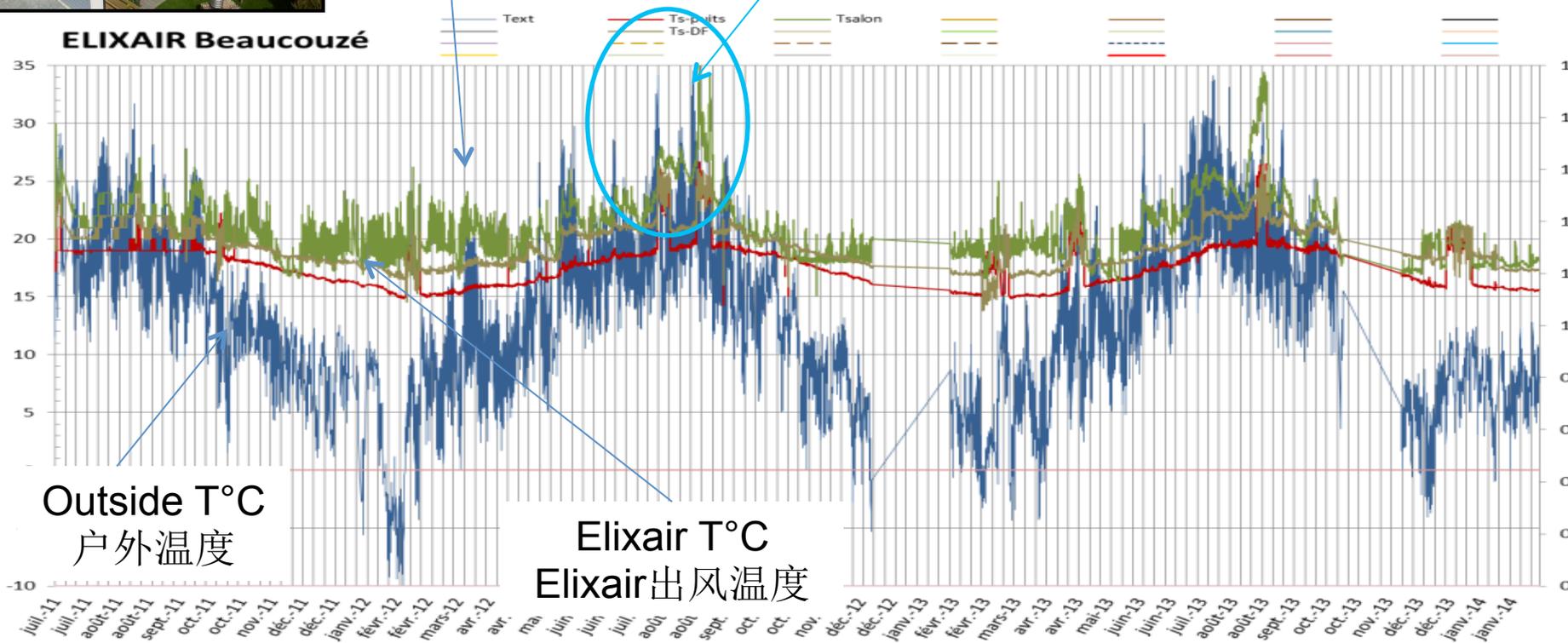
DN200 $\approx 300\text{m}^3/\text{h}$



Room T°C
室内温度

Elixair turn off = Rise
of room T°C
Elixair设备关停时

圣戈班15个品牌



Case two 案例2- Results of experience

Weber factory/office at Château-Thébaud

WEBER工厂/办公区 - 冬季

3xDN300 ≈2200/4600m³/h



Blowing T°C
二次加热温度

Hall T°C
大厅温度

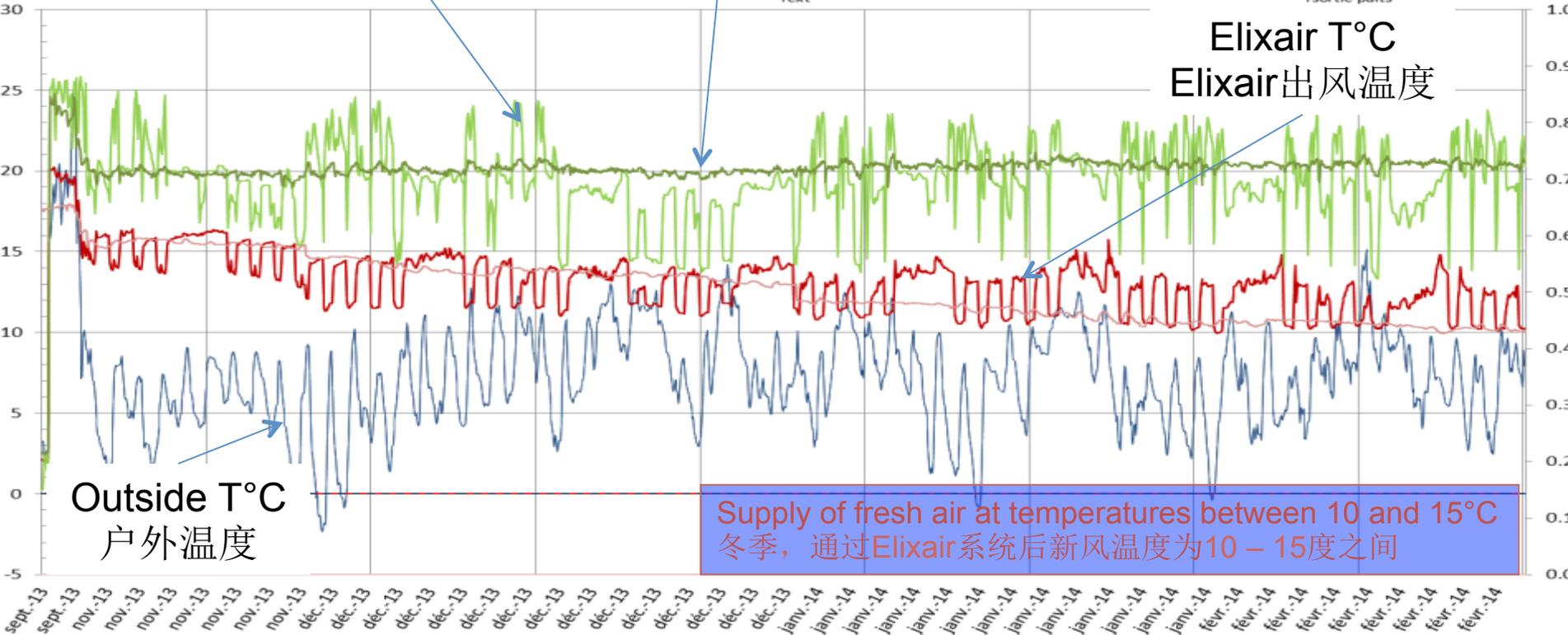
ELIXAIR Château-Thébaud



Elixair T°C
Elixair出风温度

Outside T°C
户外温度

Supply of fresh air at temperatures between 10 and 15°C
冬季，通过Elixair系统后新风温度为10 - 15度之间



Case Thres 案例3

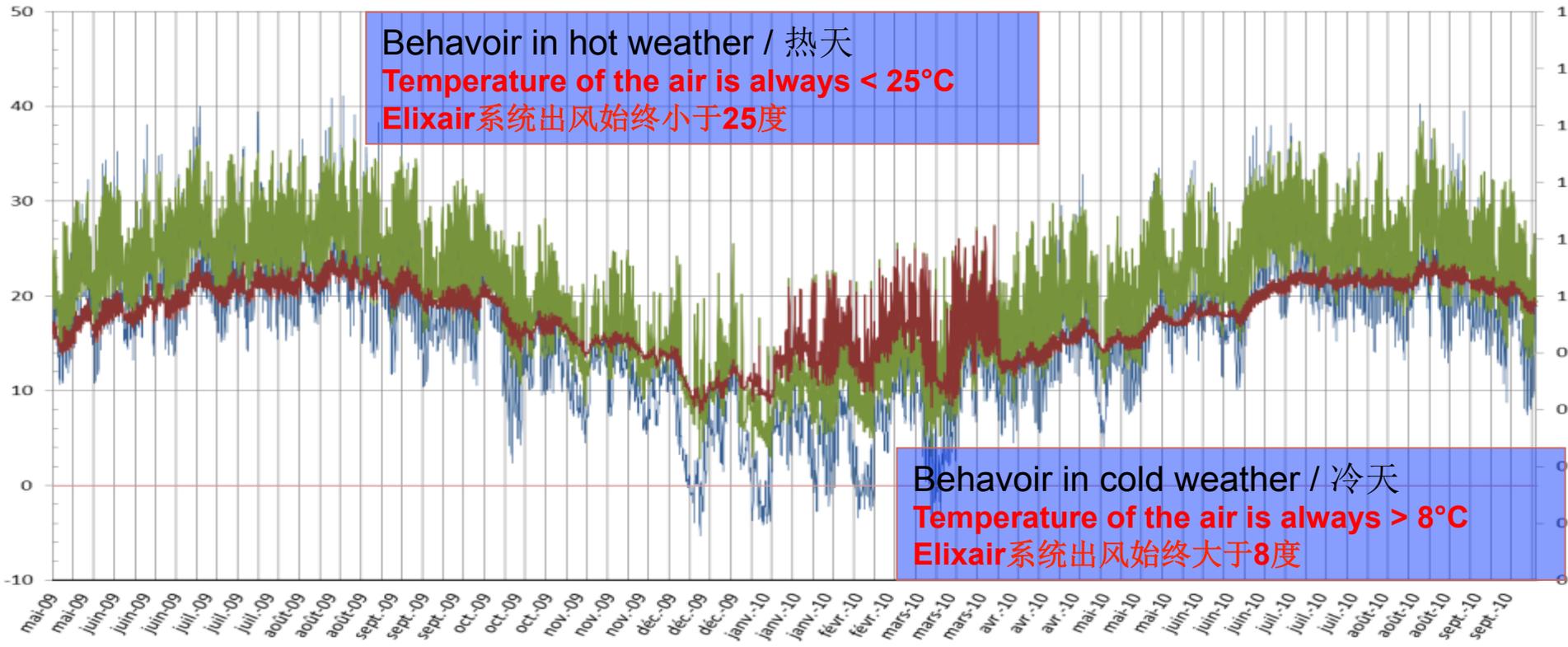
Gamm Vert greenhouse in Duras
法国GAMM绿色房屋

2xDN200 ≈ 2x700m³/h



ELIXAIR Duras

— Text — Tint — Ts-puitsmoy



Elixair in China - Changzhou SG Multi-comfort House

Elixair在中国 - 常州圣戈班舒适建筑

Energy demand for cooling+heating for a target room temperature of 25 C:

设定温度为25度时的能耗对比:

No Elixair (关闭Elixair): 8.47kWh/m²

Elixair (开启Elixair): 4.64 kWh/m²

能耗降低 45%

